

Data Dictionary
SSHEAR Fish Passage Inventory - Culverts
May 31, 2001

Attribute	Field Name	Type	Size	Values or Formats	Description
Site ID	SITEID	C	20		Unique identifier for each stream crossing. Format is open, may contain both alpha and numeric characters. Field is used as a table key and to create links to associated tables and data.
East	EAST	N			Geographic position of feature in State Plane coordinates (Washington South, NAD27). Used to map the location of the feature.
North	NORTH	N			Geographic position of feature in State Plane coordinates (Washington South, NAD27). Used to map the location of the feature.
Reported By	IDBY	C	25		Source (group, agency, or individual) responsible for original data.
Road Name	ROAD NAME	C	25		Name of road.
Mile Post	MILEPOST	N		0.01 mile	Highway mile post (to 0.01 mile) where feature is located.
County	COUNTY	C	15		Proper name of county (e.g.. Thurston, Jefferson).
Quarter Section	QSEC	C	2	NE, NW, SE, SW	Quarter section: NW, NE, SW, or SE.
Section	SECTION	N			Section
Township	TOWNSHIP	C	3	XXN	Township: XXN , where XX is the township number, N signifies north. Includes leading zero.
Range	RANGE	C	3	XXE or XXW	Range: XXE or XXW , where XX is the range number, E is east, and W is west. Includes leading zero.
Stream	STREAM	C	25		Name of the stream where the feature is located. If the stream is unnamed, enter unnamed.
WRIA	WRIA	C	10		Water Resource Inventory Area number for STREAM (above). The first two digits are the WRIA number (01-62), the remaining 4 digits and alpha character(s) are the stream number (00.0000A). Includes leading zero.
Tributary To	TRIB TO	C	25		Name of the water body to which STREAM (above) is connected. If unnamed, enter unnamed. May include WRIA & stream number.
River Mile	RM	N			Distance from mouth of stream to the feature location. Reported in miles to the nearest 0.01.
Fish Use	FISHUSE	C	7	yes, no, unknown	Indicator of fish use in stream where the feature is located; yes, no, unknown.. Determines level of feature evaluation.
Decision Criteria	FUCRITERIA	C	20	mapped, physical, biological, other	Basis for FISH USE determination: "mapped" indicates that stream is typed as 1 - 4 on DNR water type maps, "physical" means the stream meets the minimum physical dimensions specified in the Forest Practice Regulations, "biological" means fish have been directly observed, and "other" means criteria other than those listed was used (explain in comments). A "yes" FISH USE determination may be based on mapped, physical, biological or other criteria. A "no" determination is made when the stream does not meet any of the above criteria. If unknown leave blank.
Species	SPECIES	C	35	SO/CH/PK/CO/CK /SH/SRCT/RT/DB/ EB/BT	The species (from the following list) expected or known to utilize the stream where the feature is located. These species are used in the WDFW priority index model. Multiple entries are allowed, separated by /. SO = sockeye (including kokanee), CH = chum, PK = pink, CO = coho, CK = chinook, SH = steelhead, SCT = searun cutthroat, RT = resident cutthroat/rainbow trout complex, DB = dolly/bull trout, EB = eastern brook trout, BT = brown trout

Attribute	Field Name	Type	Size	Values or Formats	Description
Owner Type	OWNERTYPE	C	25	private, state, federal, tribal, county, city, unknown	General category of ownership. Values are: private, state, federal, tribal, county, city, unknown.
Sequencer	SEQUENCER	C	3	X.Y	Identifies individual culverts at multiple culvert stream crossings. Used in conjunction with Site ID as a table key. Format X.Y, where X = specific culvert number and Y = total number of culverts in crossing. For example at a triple culvert crossing the first pipe would be 1.3, the second 2.3 and the third 3.3.
Field Review Crew	FRCREW	C	25		Last names of individuals responsible for collecting field data. Separate names with /.
Field Review Date	FRDATE	C	10	MM/DD/YYYY	Date of the field review.
Shape	SHAPE	C	3	RND, BOX, ARCH, SQSH, ELL, OTH	Shape of the culvert: RND = round, BOX = rectangular, ARCH = bottomless arch, SQSH = squash (pipe arch), ELL = ellipse, OTH = other.
Material	MATERIAL	C	3	PCC, CPC, CST, SST, CAL, SPS, SPA, TMP, MRY, PVC, OTH	Culvert material: PCC = precast concrete, CPC = cast in place concrete, CST = corrugated steel, SST = smooth steel, CAL = corrugated aluminum, SPS = structural plate steel, SPA = structural plate aluminum, PVC = plastic, TMB = timber, MRY = masonry, OTH = other.
Span	SPAN	N		meters(0.01)	Horizontal dimension of the culvert, in meters to the nearest 0.01. Used in conjunction with Average Streambed Width to calculate Culvert Span to Streambed Width Ratio.
Rise	RISE	N		meters(0.01)	Vertical dimension of the culvert, in meters to the nearest 0.01. For round culverts this value will be the same as the span.
Length	LENGTH	N		meters(0.1)	Length of the culvert measured to the nearest 0.1 meters. Include aprons if present.
Streambed Material in Culvert	BEDMAT	C	3	yes, no	Specifies the presence of streambed material <u>throughout</u> the length of the culvert: yes or no .
Outfall Drop	OUTFALLDRP	N		meters(0.01)	Distance from the water surface at the downstream end of the culvert to the water surface of the plunge pool. If the stream is dry, the outfall drop is the difference between the downstream invert elevation and the elevation of the plunge pool control. In meters to the nearest 0.01.
Slope	CULVSLOPE	N		X.Y%	Slope of the culvert, reported in percent (e.g. 4.3). May be a positive or negative number.
Average Streambed Width	AVBEDWIDTH	N		meters(0.01)	The average width of the streambed (toe width), measured at the second riffle downstream of the culvert, in meters to the nearest 0.1. Used in conjunction with culvert span to calculate Culvert Span to Streambed Width Ratio.
Culvert Span to Streambed Width Ratio	CULTOERA	N		0.XY	The ratio of culvert width (span) to streambed (toe) width. Derived by dividing culvert span by average streambed width. Expressed as a decimal fraction.
Water Depth Inside Culvert	WDIC	N		meters(0.01)	Depth of water inside the culvert, measured at the downstream end away from the influence of outlet conditions, in meters to the nearest 0.01.
Water Velocity Inside Culvert	VELOCITY	N		meters/second	Field estimate of water velocity through the culvert in meters per second.
Apron	APRON	C	10	upstream, downstream, both, none	Indicates presence and location of an apron. Values are: none, upstream, downstream, both (both ends).

Attribute	Field Name	Type	Size	Values or Formats	Description
Tidegate	TIDEGATE	C	3	yes, no	Indicates presence of a tidegate: yes or no .
Plunge Pool Length	PPLENGTH	N		meters(0.01)	Distance from the outlet of the culvert to the downstream control, in meters to the nearest 0.01.
Plunge Pool Maximum Depth	PPMAXDEPTH	N		meters(0.01)	Maximum depth of plunge pool, in meters to the nearest 0.01.
Plunge pool Wetted Width	PPWETWIDTH	N		meters(0.01)	Width of the plunge pool at the water surface, in meters to the nearest 0.1.
Plunge Pool OHW Width	PPOHWWIDTH	N		meters(0.1)	Width of the plunge pool at its widest point measured at Ordinary High Water, in meters to the nearest 0.1.
Barrier	BARRIER	C	7	blank, yes, no, unknown	Results of fish passage evaluation; yes = culvert is a barrier, no = culvert is not a barrier, unknown = culvert beyond Level B analysis or Level B analysis required but not conducted. If the stream is non-fish bearing the field is left blank .
Passability	FISHPASS			0, 33, 67, 100	Percent passability based on field crews professional judgement. Interpret as: 0 = total barrier, 33 or 67 = partial barrier, 100 = not a barrier. This value is used in the PI model to derive B (proportion of fish passage improvement).
Problem	PROBLEM	C	30	outfall drop, velocity, depth, slope	Factor that determined a “yes” barrier status. Level A analysis will result in outfall drop if the measured outfall drop is > 0.24 meters or slope if the slope is > 1%. The results of the hydraulic analysis (Level B) will indicate either water depth or velocity . Multiple values allowed.
Repair Status	REPAIRSTAT	C	5	blank, OK, NG,UD, RR, FX, FX/FW	Culvert repair status: OK = not a barrier, NG = insufficient habitat gain to warrant repair (no gain), UD = potential habitat gain undetermined, RR = sufficient habitat gain to require repair, FX = barrier has been fixed subsequent to the inventory, FX/FW = the fix involves conversion to a fishway. If the stream is non-fish bearing the field is left blank .